

Tongue

Program Transcript

The tongue consists of intrinsic and extrinsic skeletal muscles. The intrinsic skeletal muscle makes up the body of the tongue itself, and the extrinsic muscles are those that move the tongue in different directions.

The prime extrinsic muscles of the tongue are the genioglossus, the hyoglossus, and the styloglossus. The intrinsic and extrinsic muscles of the tongue are innervated by the hypoglossal nerve.

In the diagram on the left, you can see the hypoglossal nerve coming in to the tongue to innervate these muscles as well as the muscles of the tongue. In addition, we see the glossopharyngeal nerve, which is a sensory nerve to the tongue, and the lingual nerve, which is also a sensory nerve to the tongue.

Coming from the area of the ear is the chorda tympani. This nerve is from the facial nerve and runs with the lingual nerve to provide taste from the anterior two-thirds of the tongue.

On the right is a drawing showing the sensory components of the tongue. The anterior two-thirds of the tongue has general sensation from the lingual nerve off the trigeminal, and taste is via the chorda tympani off the facial. The glossopharyngeal nerve provides general sensation and taste to the posterior third of the tongue, which is sometimes referred to as the lingual tonsil.

The root of the tongue is innervated by the vagus nerve. You may recall that the vagus nerve also innervates the esophagus and the intestines. This is why, when you stimulate the root of the tongue, that you may activate the smooth muscle of the stomach and the intestines.